

NewsRelease

National Aeronautics and
Space Administration

Langley Research Center
Hampton, Virginia 23681-2199



Kimberly W. Land
(Phone 757/864-9885, 757/344-8611 mobile)
k.w.land@larc.nasa.gov

June 4, 2003

RELEASE NO. 03-038

TUESDAY, JUNE 10

WHAT CAN BIOLOGY TEACH US ABOUT MATERIALS?

Materials have identified the ages of humankind: stone, bronze, iron, and, most recently, silicon. In addition to natural geological and man-made materials, biologically-produced materials are multifunctional and have exciting properties – self-replicating, self-healing properties.

Ilhan Aksay, professor, Department of Chemical Engineering and Princeton Materials Institute, Princeton University, will speak on "Materials World: What Can Biology Teach Us?" at a colloquium at 2 p.m., Tuesday, June 10, at NASA Langley's H.J.E. Reid Conference Center.

Media Briefing: A media briefing will be held at 1:15 p.m. at the H.J.E. Reid Conference Center, 14 Langley Blvd., NASA Langley Research Center. Members of the media who wish to attend should contact Kimberly W. Land at (757) 864-9885 or 344-8611 (mobile) for credentials.

Aksay will explain how materials are made and used. He will discuss the prediction that the next age of humankind will be the age of biologically-inspired materials and emphasize the importance of using biologically-inspired methods in technological applications.

Aksay earned a bachelor of science degree in ceramic engineering at the University of Washington and a master's degree and doctorate in materials science and engineering, at the University of California, Berkeley. In 1992, Aksay joined Princeton where he researches the use of colloidal and biomimetic techniques in ceramic processing.

-more-

-2-

Currently, his work focuses on the use of complex fluids to control the architecture of organic/ceramic nanocomposites. In recognition of his contributions to ceramic processing, Aksay received the Richard M. Fulrath Award of the American Ceramic Society (1987) and the Charles M. A. Stine Award of the American Institute of Chemical Engineers (1997). Aksay is a Fellow of the American Ceramic Society and an honorary member of the Japanese Materials Research Society.

-end-